IN THE CLAIMS

--1. **(Amended)** An apparatus for transporting ions from an ionization source region to a first pressure region within a mass spectrometer, wherein said apparatus comprises:

first and second capillary sections each having an inlet end and an outlet end; and

a union having first and second openings, said union configured to removably interface said first capillary section to said [and] second capillary section[s] such that ions may be delivered from said source region into said first pressure region [mass spectrometer];

wherein said union comprises a sealing mechanism for sealing the connection between said ionization source region and said first pressure region of said mass spectrometer.

2. **(Original)** An apparatus according to claim 1, wherein said first section comprises a channel having a helical structure.

3. **(Original)** An apparatus according to claim 1, wherein said union comprises means for removably securing said ends of said first and second sections.

4.**(Original)** An apparatus according to claim 1, wherein said union comprises means for providing an airtight seal between said ends of said first and second sections within said union.

5. **(Original)** An apparatus according to claim 1, wherein said inlet ends and said outlet ends comprise conductive end caps.

6. **(Previously presented)** An apparatus according to claim 1, wherein said apparatus maintains pressure conditions in said first pressure region of said mass spectrometer.

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7. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source is an API source.

8. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source is an ESI device.

9. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source is a pneumatic assisted electrospray source.

10. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source is an electron impact source.

11. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source is a chemical ionization source.

12. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source is a matrix assisted laser desorption ionization source.

13. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source is a plasma desorption source.

B1 Cont'd

14. **(Previously presented)** An apparatus according to claim 1, wherein said ionization source uses liquid chromatography.

15. **(Original)** An apparatus according to claim 1, wherein said apparatus is used to multiplex sample materials.

16. **(Amended)** A system for performing mass spectrometric analysis, wherein said system comprises:

at least one ion source for producing ions;

a mass spectrometer having an inlet orifice configured to accept the ions; and

a multiple part capillary device configured to provide a removable interface between said ion source and a first vacuum region of said mass spectrometer;

wherein said removable interface maintains pressure conditions of said mass spectrometer.

17. **(Original)** A system according to claim 16, wherein said multiple part capillary device comprises:

a first capillary section including an inlet orifice for accepting ions from said ion source;

a union for connecting to at least said first capillary section;

a second capillary section connected to said union; and

a sealing mechanism for sealing said removable interface between said ion source and said mass spectrometer.

B1 Cont'd

18. **(Original)** A system according to claim 17, wherein at least one of said first and second capillary sections comprises a channel having a helical structure.

19. **(Original)** A system according to claim 17, wherein at least one of said first and second capillary sections is insulating.

20. **(Original)** A system according to claim 17, wherein at least one of said first and second capillary sections is metallic.

21. **(Original)** A system according to claim 17, wherein at least one of said first and second capillary sections comprises a flexible tube.

22. **(Original)** A system according to claim 17, wherein at least one of said first and second capillary sections comprises a heated capillary tube.

23. **(Original)** A system according to claim 16, wherein said at least one ion source is selected from the group consisting of an electrospray ion source, an atmospheric pressure ionization source, a matrix-assisted laser desorption/ionization ion source, a pneumatic assisted electrospray source, an electron impact source, a chemical ionization source, a plasma desorption source and a liquid chromatography source.

B1 Cont'd

24. **(Original)** A system according to claim 16, wherein said mass spectrometer is selected from the group consisting of a quadrupole mass spectrometer, a time-of-flight mass spectrometer, an ion trap mass spectrometer, an ion cyclotron resonance mass spectrometer, and a magnetic sector mass spectrometer.

25. **(Amended)** A method for performing mass analyses using at least one mass spectrometer, wherein said method comprises the steps of:

generating ions in an ion source region;

providing a multiple part capillary having a removable interface between said ion source region and a first pressure region of said mass spectrometer while maintaining pressure conditions of said first pressure region of said mass spectrometer;

delivering said ions from said ion source region into a first pressure region of said at least one mass spectrometer via said [a] multiple part capillary device [for providing a removably interface between said ion source region and said mass spectrometer while maintaining pressure conditions of said first pressure region of said mass spectrometer]; and

performing at least one mass analysis on said ions in said at least one mass spectrometer.

26. **(Original)** A method according to claim 25, wherein said ions are generated in said ion source region using a source selected from the group consisting of an electrospray ion source, an atmospheric pressure ionization source, a matrix-assisted laser desorption/ionization ion source, a pneumatic assisted electrospray source, an electron impact source, a chemical ionization source, a plasma desorption source and a liquid chromatography source.

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27. **(Original)** A method according to claim 25, wherein said mass analysis is performed using a mass analyzer selected from the group consisting of a quadrupole mass analyzer, a time-of-flight mass analyzer, an ion trap mass analyzer, an ion cyclotron resonance mass analyzer, and a magnetic sector mass analyzer.--